REMARKS

Status of this application

In the Office Action mailed on August 23, 2005:

claims 1-18 were rejected under 35 U.S.C. §101 for "nonstatutory double patenting;

claims 1-18 were rejected under 35 U.S.C. §101 because the recitation of an "application program" was deemed to "non-statutory as not being tangible;"

claims 1-18 were rejected under 35 U.S.C. §112 on the basis that the transmission of data to an internet address as recited in claims 1, 8 and 12 was deemed to be inadequately described in the specification;

claims 1-5 and 8-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Meltzer et al. Patent 6,542,912 (hereinafter "Meltzer") and further in view of Call Patent 6,154,738 (hereinafter the "Call Patent"); and

claims 6-7 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meltzer and the Call Patent as applied to claims 1-5 and 8-16 above, and further in view of Walker et al. (hereinafter "Walker"), US Patent No. 6,041,308.

This response amends claim 1 to correct internal antecedent references in the claim. This response further requests reconsideration of the "obviousness" rejections of claims 1-18 for the reasons stated below. The following comments treat the above-noted rejections in the order stated in the outstanding Office Action.

The Double Patenting Rejection

Claims 1-18 were provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 29-36 of co-pending Application No. 10/120,175, a division of the present application. Although applicant does not concede that the claims in this application and in the above-identified division of this application are not patentably distinct from each other, applicants are filing herewith a terminal disclaimer in compliance with 37 CFR 1.321(c) as

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suggested by the Examiner to overcome this rejection. Oracle International Corp. is the owner of record of both this application and the above-identified division of this application.

The Non-Statutory Subject Matter Rejection

Claims 1-18 were rejected under 35 U.S.C. 101 because, as stated in paragraph 5 of the Action, "an 'application program' to perform the method of claims 29-36 is non-statutory as not being tangible." Since there are no claims numbered 29-36 in the present application, it is likely that that the Examiner's rejection of claims 1-18 resulted from a review of claims 29-36, the pending claims of the divisional application upon which the double patenting rejection was based, and was included in this Action inadvertently.

In any case, reconsideration is requested. The rejected claims 1-18 as a whole are directed to methods and apparatus for performing computer-related processes that are limited to practical applications in the technological arts and which produce a concrete, tangible and useful result: permitting executing application programs to obtain and process information obtained via the Internet from identified remote resources using a standard API that serves such application programs. That is all that section 101 requires. As stated at §2106, part IV(A), of the Manual of Patent Examining Procedure:

> "As the Supreme Court has held, Congress chose the expansive language of 35 U.S.C. 101 so as to include "anything under the sun that is made by man." *Diamond v. Chakrabarty,* 447 U.S. 303, 308-09, 206 USPQ 193, 197 (1980). Accordingly, section 101 of title 35, United States Code, provides: Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title. *In Chakrabarty,* 447 U.S. at 308-309, 206 USPQ at 197, the court stated: In choosing such expansive terms as "manufacture" and "composition of matter," modified by the comprehensive "any," Congress plainly contemplated that the patent laws would be given wide scope.
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"This perspective has been embraced by the Federal Circuit: The plain and unambiguous meaning of section 101 is that any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may be patented if it meets the requirements for patentability set forth in Title 35, such as those found in sections 102, 103, and 112. The use of the expansive term "any" in section 101 represents Congress's intent not to place any restrictions on the subject matter for which a patent may be obtained beyond those specifically recited in section 101 and the other parts of Title 35. * * * Thus, it is improper to read into section 101 limitations as to the subject matter that may be patented where the legislative history does not indicate that Congress clearly intended such limitations. *Alappat,* 33 F.3d at 1542, 31 USPQ2d at 1556."

The "application programs" referred to claims 1-18 of this application are "tangible." As is well understood, application programs, indeed all computer programs, consist of instructions that are recorded in physical media which are accessed by and control the operation of a physical processor that executes those instructions. The Examiner has cited no authority of the proposition that referring to a computer program as an element in an apparatus claim, or as something that participates in a claimed process, renders the claim unpatentable under Section 101.

The Lack of Enablement Rejection

Claims 1-18 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The Examiner noted that claims 1, 8 and 12 specify "an Internet address to which an output information request directed to said given data resource may be transmitted" and "transmitting said reformatted request to the Internet resource address", which were not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention."

Reconsideration is requested. The basic mechanism involving the claimed "Internet address is set forth in the Summary of the Invention at pages 3-4 of applicants' specification as follows:

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In a principle aspect, the present invention takes the form of methods and apparatus for obtaining information from each of a plurality of diverse data resources having different characteristics. A separate service description for each given data resource is stored in a database called the Services Registry. Each service description includes: the address to which an information request may be transmitted; a specification of the nature of the input information to be supplied; and a description of the nature of the output information to be supplied in response to request.

Service requests identifying particular resources may be issued by application programs. A service interface program is then executed in response to each such service request to obtain the particular service description corresponding to the identified resource from the Services Registry. The interface program then transmits an output information request to the address specified in said particular service description, supplies input information meeting the specification contained in said particular service description to the resource, and routes output information provided by said particular resource to the requesting application program.

As explained, for example, at page 11, lines 6-15, the "Internet address" which is stored in each services description may, in a common scenario, take the form of a specific URL that is used in an HTTP Get or Put method to transmit an output information request to the Internet address specified by the stored URL. It is submitted that expressing an Internet address as a URL and then transmitting formatted request messages to that URL are common techniques which form the basis for the HTTP request-response protocol, the fundamental mechanism used for most data exchanges which take place in the World Wide Web and other services. The Examiner's suggestion that the description provided by the specification would be inadequate to explain to one skilled in the art what the address (URL) is and how to use it is simply incorrect.

Moreover, the Examiner has failed to explain or establish any reasonable basis for questioning the adequacy of the disclosure. As stated in the M.P.E.P. at §2106.01:

"When basing a rejection on the failure of the applicant's disclosure to meet the enablement provisions of the first paragraph of 35 U.S.C. 112, the examiner must establish on the record that he or she has a reasonable basis for questioning the adequacy of the disclosure to enable a person of ordinary skill in the art to make and use the claimed invention without resorting to undue experimentation. See *In re Brown*, 477 F.2d 946, 177 USPQ 691 (CCPA 1973); *In re Ghiron*, 442 F.2d 985, 169 USPQ 723 (CCPA 1971)."

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Reconsideration of the rejection of claims 1-18 based on the alleged inadequacy of the disclosure of the claimed Internet address and the transmission of a request message to that address is requested.

Claim Rejections - 35 USC § 103

Claims 1-5 and 8-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Meltzer in view of the Call Patent. The Examiner contends that the subject matter set forth in claims 1 and 12 is anticipated by Meltzer, with the exception that the Examiner acknowledges that Meltzer does not explicitly disclose "producing an information request message that includes said input information" or "transmitting said information request message to the Internet address included in said particular service description" as set forth, for example, in claim 1. The Examiner asserts however, that because Meltzer and the Call Patent both describe systems in which information is exchanged between manufacturers and distributors and retailers, it would have been obvious to modify Meltzer's system to include a mechanism taught by the Call Patent for transmitting a request message to an Internet address.

Reconsideration is requested. Applicants claim a service interface program that receives requests for information via an application program interface from an application program. The received request specifies a particular resource. The interface program then retrieves a particular service description that corresponds to that particular resource. The interface program then processes input data obtained from the requesting application program to produce a request message. The interface program then transmits the resulting request message to an Internet address that is contained in the particular service description previously retrieved. Finally, the interface program processes the raw response data supplied by the particular resource in response to the transmitted request message to create a reformatted response which is routed to the requesting application program.

Metzger does not disclose or suggest such an interface program for the reasons which will be explained in detail the following specific remarks. Some of the leading differences may be briefly summarized as follows:

(1)   Applicants' invention as claimed establishes an API that is interposed between requesting application programs and the Internet, whereas Meltzer's

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"interface" is interposed between the Internet and each service provider host
that performs transaction processing.

(2)   Applicants' service descriptions define the form of input data that is supplied
to the service interface program by application programs and the form of the
output data that is returned from the service interface program to the
application programs, whereas Meltzer's interface defines the format of
standard business XML documents that are exchanged via the Internet
between trading partners.

(3)   Applicants' interface program exchanges data via the Internet in whatever
format is normally used by each particular resource, but exchanges data with
requesting application programs in a format specified by the service
description of each resource. In contrast, Meltzer's interface programs are
selected based on the detected type of each incoming XML document that is
supplied via the Internet in a standard format, and Meltzer's interface
programs then perform transaction processing to generate output XML
documents in a standard form that are returned via the Internet to the trading
partner that supplied the input document.

(4)   Applicants' interface programs as claimed accept a resource designation,
retrieve a service description corresponding to the designated resource, and
then create and transmit a request message to an Internet address contained in
the received service description. As acknowledged by the Examiner, Meltzer
does not describe a mechanism for creating a request message that includes
input data accepted form an application program, and for then sending that
request message to an Internet address contained in retrieved service
description. Although the Examiner asserts that incorporating that claimed
function could have been added to the Meltzer system in a way that would
have been obvious in view of the Call Patent, there is nothing in either
reference that justifies such a conclusion.

(5)   Applicants' interface programs as claimed process the raw response data
received via the Internet from the particular remote resource in accordance
with a processing specification defined in the retrieved service description and

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then routes a reformatted response to the requesting application program. In contrast, Meltzer's interface program processes input documents in standard form specified by the service description that are received via the Internet to create output documents in standard form that are returned via the Internet.

As pointed out by the Examiner, Metzler describes a service description database that includes "service descriptions" (called business interface definitions or "BIDs") at col. 10, lines 32-54. These BIDs have a layout depicted in Fig. 2 and define, for each interface, among other things, the standard format for the input document or documents (at 211) which are received via the Internet and processed by the service provider, the standard format for the output document or documents (at 212) returned by the service provider via the Internet, and the network location where the service is performed (at 209). But this BID data is employed by the Meltzer system to define the Internet interface to each registered service provider, and not to define the data received from and supplied to an application program from service interface program that performs the functions claimed by applicants.

As discussed in detail below, Meltzer fails to disclose a service interface program that performs the functions set forth in independent claims 1, 8 and 12, and the passages cited by the Examiner do not support the conclusions expressed in the outstanding Office Action.

The Examiner suggests that Meltzer teaches an interface program that receives a service request identifying a particular resource from an executing application program and then obtains a service description corresponding to the particular resource, citing col. 19, lines 16-40 of Meltzer. However that cited passage describes the process of building a BID by gathering the data it stores, and nothing in that cited passage says anything about an interface program that receives a service request from an application program that identifies a resource and the retrieves a corresponding service description. The Meltzer program that is used to build a GID described in the cited passage of col. 19 fails to perform any of the recited functions which the claimed interface program is required to perform by the claims.

The Examiner next suggests that, at col. 3, lines 4-58, Meltzer teaches an interface program that obtains input information from an executing application program that conforms to the input specification contained in a retrieved particular service description. While Meltzer does describe a remote services program that receives input information (one or more standard XML input documents) via the Internet from a remote trading partner (which may submitted by

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an executing application program), Meltzer does not do this in the sequence claimed. Meltzer receives the input document, determines its type, and then processes the input document using routines that are established to conform to the service description. Nowhere does Meltzer suggest that an executing application program first issues a service request that identifies a particular resource, and that an interface program then processes that service request by retrieving a service description from a database and thereafter obtains input information from the requesting application that conforms to the input processing specification contained in the received service description.

The Examiner cites the passage at col. 24, line 56 to col. 25 line 5 of Meltzer which describes how the service provider receives a standard input document via the Internet, parses it to identify the service type requested, translates the incoming document into a native format for processing by transaction processing routines registered for handling incoming documents of that type, and then returns the resulting output data via the Internet as a standard XML output document. This passage does not describe an interface program that first receives a service request from an executing application that identifies a particular resource, then retrieves a service description, then obtains input information from the requesting application, and then creates a request-message that is sent via the Internet to the Internet address of the particular resource contained in the retrieved service description, as required by all of the claims.

The Examiner concedes that Meltzer does not describe an interface program that produces a request message in the manner claimed nor does Meltzer transmit such a request message via the Internet to an Internet address contained in the service description. Instead, Meltzer identifies the requested service from the content of the received standard input document and then processes the input document using locally executed routines for handling input documents of the type received.

But the Examiner suggests that Meltzer's mechanism could be modified in some unspecified way in view of the teachings of the Call Patent. Reconsideration is requested.

At this point, applicants' undersigned attorney acknowledges that it is indeed a "small world," that he is the same "Charles G. Call" that is the named inventor of the system described in the cited Call patent, and that he is accordingly familiar with its teaching.

The Examiner's characterization of the Call Patent is correct, but the Examiner does not explain how one skilled in the art would be led to modify the Meltzer system in view of its

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teachings. Meltzer describes a system for performing transactions between trading partners by exchanging standard XML documents which have a form defined in discoverable "business interface definitions." The Call Patent describes a way in which information about a product designated by a universal product code can be obtained via the Internet through the use of an Internet accessible cross-referencing facility, such as the domain name system, that can convert an available product code into the Internet address from which information about that product can be obtained.

The Examiner states that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Call and Meltzer to include transmitting said reformatted request to the Internet resource address and receiving a raw response via the Internet. But the claim requires that the reformatted request message be created by an interface program that receives a request from an executing application program that designates a particular resource, and the interface program the retrieves a service description, and then obtains input information from the requesting application in accordance with an input processing specification, and thereby creates the reformatted request message that is sent via the Internet. The Examiner concedes Meltzer does not disclose creating a reformatted request in the manner claimed, and does not specify how or why the Call Patent's teaching might be employed to modify Meltzer's system to yield the subject matter claimed.

In Meltzer's system, business documents having a standard form are exchanged between trading partners who use the document formats and the network addresses published in the business interface definitions. There appears to be no reason why one skilled in the art would be led to modify the Meltzer system to use the Call Patent's teaching, and the Examiner does not explain how or why one skilled in the art might modify Meltzer's system in accordance with the Call Patent to yield the subject matter claimed.

Reconsideration of the rejection of claims 1-5 and 8-16 based on the proposed combination of Meltzer and the Call Patent is accordingly requested since Meltzer does not disclose an interface program that performs the claimed functions, and because there is nothing in the Call Patent that would suggest a modification of the Meltzer trading system that would yield the claimed interface program.

The Examiner further rejected claims 6-7 and 17-18 as being unpatentable over Meltzer and the Call Patent as applied to claims 1-5 and 8-16 above, and further in view of Walker.

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These dependent claims further recite that the service description contains additional information that can be used to verify that the system is operating correctly and that requests are being issued from authorized sources before those requests are satisfied. The Examiner concedes that Meltzer and the Call Patent do not describe these additional features, but cites Walker in support of the contention that these additional features would have been obvious. Reconsideration is requested.

With respect to claims 6 and 17 which claim storing a fixed input value and a fixed output value in the service description to test the system, the Examiner cites the teaching of Walker in which a test is performed to see if a purchase offer is accepted or rejected. It is not clear how this test might be incorporated into the Meltzer system, but if it were it would plainly not meet the limitations stated in claims 6 and 7. Walker does not teach storing fixed input and output values in a service description, sending the input value in a request message, and comparing the resulting output value with the stored output value as claimed. The rejection of claims 6 and 17 based on Walker should be withdrawn.

With respect to claims 7 and 18 based on Walker's teaching of encrypted transactions for security, it is submitted that one skilled in the art might indeed use a variety of well known security techniques such as encrypted transmissions to improve the security of Meltzer's transactions, but that does not make it obvious to modify Meltzer by placing security information in a service description to insure that requests are not responded to if they are found to come from an unauthorized source. There is thus nothing in the Walker patent that suggests the subject matter specifically claimed in claims 7 and 18.

Conclusion

Reconsideration and allowance of claims 1-18 as now presented is requested for the reasons presented above.

Respectfully submitted,
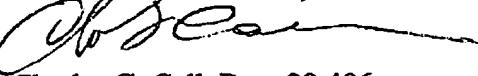
Dated: December 23, 2005   Charles G. Call, Reg. 20,406

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Certificate of Transmission under 37 CFR 1.8

I hereby certify that this amendment, a petition for a time extension, and a credit card payment form are being transmitted by facsimile to the central facsimile number of the U.S. Patent and Trademark Office, (571) 273-8300, on December 23, 2005.

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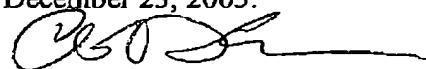
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